TAB

POLAND

(POSITION LANGUAGE DEVELOPMENT)

DESIGN REQUIREMENTS STATEMENT

STATINTL

Prepared By:

1 September 1970

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REFERENCES

1. The following policy decision relating to the
POLAND project was made during the analysis of the Human
Resources Systems as a result of documentation presented
to the Director of Personnel.

> There will not be a mechanized
> monitoring control established
> over the assignment of personnel
> to positions having language
> requirements.

2. The scope of the POLAND project is contained in

████████████████████████

STATINTL

I. <u>OBJECTIVES</u>

The objectives of the POLAND project are:

1. The retention and maintenance of all necessary data relating to language requirements levied on organizational components and positions within the Agency.

2. Provide necessary reports to aid in the administration of the Language Development Program.

II. BACKGROUND AND DISCUSSION

A. Background

The Deputy Director for Support (DDS) organized the Support Information Processing Systems (SIPS) task force in the latter part of 1968. The main objective of the task force was, and still is, to improve DDS operations via automatic data processing or otherwise. The task force was divided into three groups: Human Resources (under which POLAND resides), Financial Resources, and Materiel Resources.

Five integrated systems are being developed by the Human Resources group in support of DDS objectives. The five systems are:

1. Manpower Control System
2. Skills Inventory System
3. Staffing Authorization (T/O) System
4. Security Automated Name Check System
5. Special Clearances System

The Manpower Control System (MCS) is the hub of the systems and will interact with the others as required. MCS will contain, but not be limited to, necessary employee information to process personnel assignments, fitness reports,

military and draft status reporting, step increases,
overseas control, insurance and hospitalization, retire-
ment and disability, locator and emergency references,
security approval and control, badging and credentials,
and central cover controls.

The Skills Inventory System will contain, but not be
limited to, necessary information relating to language
proficiencies, training, skills, and qualifications of
Agency resources.

The Staffing Authorization System will contain necessary
information relating to the organizational hierarchical
structure of the Agency and the authorized positions within
these structures. POLAND, a project within the Staffing
System, will contain all the necessary information relating
to the language requirements levied upon organizational
units and positions within the Agency.

B. Present System

The present Language Development Project (LANGDEV),
hereinafter referred to as the Position Language Development
Project (POLAND), supports ███████████████ STATINTL
(Language Development Program). This program is administered
by the Language Development Committee which consists of
representatives from each of the Directorates and the Offices

Currently, this project consists of the Language Control Register (LCR) and associated language requirements incorporated in the Position Control Register (PCR). The project design was presented to and approved by the Language Development Committee on 17 June 1969.

Input Processing

The language requirements from the various components are submitted to Position Managememt and Compensation Division (PMCD/OP). A Form 261 - Staffing Complement Change Authorization - is prepared by PMCD reflecting the language requirements of the components. The completed Form 261's are then sent to Statistical Reporting Branch (SRB)/OP for further processing. The coding clerk in SRB transcribes the language data from the Form 261 onto Form 1023 (Staffing Complement Change Notice Coding Sheet). The data on Form 1023 is then keypunched on paper tape and used as input into the present Table of Organization (T/O) computer system.

Master File

The present T/O system maintains, as a part of the master file, all of the necessary data relating to the language requirements that have been levied against each organizational unit and position within the Agency. The T/O Master file is updated at the end of each month.

Reporting

Two reports are produced in support of the POLAND project. The first is the Position Control Register (PCR) which reflects the organizational hierarchical structure of the Agency, the authorized positions within each organization unit, the incumbents of each position, and the language requirements that have been levied against an organizational unit or position. The second is the Language Control Register (LCR) which reflects each organizational unit and position within the Agency that has a language requirement levied against it. The LCR displays actual language proficiencies for each incumbent against the language requirements of the unit.

Historical Information

Since the POLAND project is still in its infancy, there are no historical requirements.

C. Problem Areas

The present Language Development Program, from one way of thinking, is in a developmental status and is currently undergoing refinement. The following problems have been surfaced.

1. One of the major problems with the present system
is the preparation of input data. Components submit
their language requirements to Position Management
and Compensation Division (PMCD)/OP. After receipt of
these requirements, PMCD transcribes the language
requirements to a Form 261 (Staffing Complement Change
Authorization). The completed Form 261 is then routed
to Statistical Reporting Branch (SRB)/OP. The coding
clerk in SRB retranscribes the language requirements
to a Form 1023 (Staffing Complement Change Notice
Coding Sheet). The data on the Form 1023 is then
keypunched on paper tape and used as input to the
computer system.

This method of input preparation is wasteful in
that the duties performed by PMCD and SRB in the
preparation of the Form 261 and Form 1023 are duplicative.

2. Another problem area in the present system concerns the
manner in which language requirements are defined.
Cases have been found in which unit requirements have
been levied against a Division as well as to the Office.
This can result in inaccurate reporting in that an
employee shown on the Language Control Register could
possess multiple language skills which could satisfy

both the Office and Division language requirements.

It then becomes a matter of guesswork in determining

which unit requirement he satisfies.

It is hopeful that a resolution to these

problems will improve the overall efficiency of the

program.

III. CONCEPTUAL DESCRIPTION OF PROPOSED SYSTEM

A. Concept

POLAND will be an integral part of the Staffing
Authorization System and will work in conjunction with
the Manpower Control System and the Skills Inventory
System. The Manpower Control System will contain
information on all Agency affiliated personnel; the
Skills Inventory System will contain information relating
to the language proficiency and skills of Agency staff
employees; and Staffing will contain information relating
to the organizational hierarchical structure of the
Agency and the authorized positions within. POLAND will
contain information relating to the language requirements
levied upon the organizational units and positions within
the Agency.

A Data Management Center (DMC) is planned which will
receive the bulk of input transactions to the system.
The DMC will process the information via automatic data
processing means, and produce and distribute the various
output reports. POLAND will utilize the facilities of
the DMC to improve the efficiency of the system.

Security features will be built into the system to maintain the integrity of stored information. Input to, or data within, the POLAND project will not be accessible to any component (or other computer system) unless so programmed.

B. System Capabilities

In order to give the user a general idea of what can be expected from the proposed POLAND project, a brief summary is given below. This, of course, is subject to further modification to meet requirements as yet unidentified.

STATINTL ████████████████████████ defines the policies and assigned responsibilities of the Language Development Program. The POLAND project will be designed in such a manner as to maintain the necessary data and provide management the necessary reports to assist them in the administration of their duties with regard to the program.

Input Processing

The procedures for the preparation of input to the POLAND project will be modified in order to increase the efficiency of input processing. A new multi-purpose form will be designed to replace the current Form 261 and Form 1023. This form will serve

the dual purpose of providing notification of

language requirement changes to the consumer

and also as input to the computer system. After

the preparation of this form, one copy will be

retained by the originating component and the

others forwarded to PMCD/OP. PMCD will act as the

control point through which all language requirements

flow. It will be their responsibility to review

requirements to insure that they are in proper input

format and that any organization or position related

data contained in the requirement is valid. After

review by PMCD, the forms will be routed to the Data

Management Center (DMC). An operator in the DMC

will then enter the data into the computer system.

The POLAND project will be designed in such a

manner as to require only the data that is changing

as input. For example, if the number of personnel

needed to fill a language requirement is changed,

the only data items required on the input transaction

would be certain control items (i.e., Organization

Code) and the changing data item (i.e., Number Required).

It would not be necessary to code those data items

that were not changing (i.e., Type Requirement,

Proficiencies Required, etc.).

The redundancy of coding 'specific' language requirements against both a position and the associated unit recap will be eliminated. Through improved design of the POLAND project, it will be necessary to input 'specific' language requirements against the position one time only. The system will automatically include these requirements in the unit recap together with the 'general' requirements and minimum number requirement that had previously been identified on the Language Control Register.

Listings of the Position Control Register and language rosters with associated language codes will be available to provide components the necessary organization, position, and language information required for the preparation of the form.

The use of the new form and the above mentioned input procedures will result in:

1. The elimination of the coding clerk duties as presently accomplished by SRB/OP.

2. The elimination of the duplication of effort by PMCD and SRB.

3. A decrease in the number of input errors into the system.

4. A reduction in the amount of time required for input preparation.

Complete, detailed user instructions
accompanying the form will aid the components in
defining language requirements, thereby resulting
in more accurate reporting.

Up-to-Date Master File

The proposed POLAND project will maintain an
accurate, up-to-date master file which will contain
all necessary information for the identification of
positions or organizational units to which language
requirements are to be applied, the type of requirement
(i.e., specific or general), number of personnel
required, proficiency levels required, etc.

In order to maintain the up-to-date file, the
update frequency will be increased from the current
monthly cycle to a daily cycle utilizing the new input
forms. This intensified updating frequency will insure
that the master file is always current to within a
twenty-four hour period. Strict edit features will be
utilized by the POLAND project programs to insure that
only valid data is entered into the system.

In addition to the strict edit features, certain
controls will be established by the POLAND programs to
identify unusual conditions. Such unusual conditions

as multiple unit language requirements (as described
in #2 of Problem Areas) will be identified to insure
that components comply with established procedures.

Reporting

The POLAND project will maintain in its master
file all necessary data to provide management with
comprehensive and timely reports. This will be
accomplished either directly from information
contained in the POLAND master file or through
access to the Manpower Control System and Skills
Inventory System.

The primary report, the "Language Control Register"
(LCR) will continue to be produced with no major
modifications. The unit 'recap' within the LCR will
be retained to provide management with a recapitulation
of the language requirements within a component.

The POLAND project will have the capability of
producing any additional reports necessary to meet
expanded requirements.

On-line Query Capability

The establishment of an on-line POLAND project
with the capability for response to queries from remote
terminals will be a systems capability.

Historical Information

Pertinent POLAND reports will also be produced
utilizing computer output micro-film techniques. In
addition to the customers' hard copies, two or more
copies of the reports will be produced on microfilm
cassettes, depending on the need. One microfilm copy STATINTL
will be sent to the Archives repository ████████████

STATINTL ███████ for permanent retention in case of an emergency.
The other(s) will be retained in the Data Management
Center or other selected sites, where microfilm viewers
will be provided. Hard copies will be obtainable merely
by pushing a button on the viewer.

Utilization of microfilm for storage of these
necessary documents will:

1. Enhance the speed by which information is retrieved.
2. Eliminate the necessity for recalling hard copy
   documents from Archives.

The new Position-Language Control Form will be
retained in PMCD/OP for a period of four years and
then sent to the Archives repository for permanent
retention.

IV.   ADVANTAGES & DISADVANTAGES

A.   Advantages

1.   The establishment of new input procedures and the
use of the new multi-purpose form will result in:

- the elimination of the duplication of effort
by the various components concerned;

- a reduction in the amount of time required for
input preparation;

- an elimination of the coding function by SRB; and

- the elimination of input preparation by the
Office of Computer Services.

2.   Improved edit features will reduce the amount of
invalid data being input to the system.

3.   Computer controls established to surface unusual
conditions will facilitate more accurate reporting.

4.   Daily update cycles will improve reporting capabilities.

5.   Automatic recapping of 'specific' language requirements
will eliminate the redundancy in coding.

B.   Disadvantages

None surfaced.

V. IMPACT

A. Assumptions

The POLAND project is based on the following assumptions.

1. That management desires to maintain control of information pertaining to the Language Development Program thru the continuance of the Language Control Register.

2. That the manner by which language requirements are identified in the LCR thru the use of a unit 'recap' will be continued.

3. That the POLAND project will be able to obtain information from the Manpower Control System and the Skills Inventory System.

4. That computer resources (hardware and software) will be available for maintaining the POLAND project.

5. That resources (personnel and computer) will be available to maintain both the old and new POLAND projects during the conversion period.

6. That the Position Control Register will contain necessary language control information (i.e., organization codes identifying organizational language units).

7. That all language components will have access to listings of language codes and associated language clear texts.

B. Impact on Present System

The present system will be systematically merged into the new POLAND project. The manual effort now expended on recording language information on multiple forms will no longer be required. New input procedures will be developed to ease input preparation. Management will have the capability to effectively control and maintain the Language Development Program.

C. Impact on User Components

1. Position Management and Compensation Division/OP will act as the control point for the monitoring of all position language requirements and validation of all position related data appearing on the requirements.

2.   A training period will be required to acquaint

personnel with the new forms and input procedures.

3.   The duties of the coding clerk will be eliminated.

4.   Keypunching of paper tape transactions will be

unnecessary.

VI.   CONVERSION

Conversion from the old to the new POLAND project will
be done via a one-time computer program. All data maintained
in the current project will be converted to the new POLAND
project. Since new data items are not being added to the
new POLAND project, all conversion can be accomplished thru
the use of the computer without the need for any manual
effort by user components.

VII.   MAINTENANCE

Workload and manpower requirements should be reduced
in maintaining the new POLAND project. The establishment
of a new multi-purpose input form will eliminate the
necessity for dual recording of language requirements
and eliminate the coding clerks' duties and keypunching
of paper tape transactions. The daily update cycle will
allow for input of language requirements to the computer
system as they are formulated thereby eliminating 'peak'
or high volume input periods just prior to reporting.
Thru the automatic recapping of 'specific' position
language requirements by the computer, the volume of input
transactions will be reduced.

VIII. HARDWARE AND SOFTWARE REQUIREMENTS

A. Hardware

1. Computer and peripheral equipment chosen for the Manpower Control System.

2. Micro-film equipment chosen for the Data Management Center.

B. Software

1. Software development for converting the existing language requirements.

2. Software development for handling remote terminal input to the POLAND project.

3. Software development for editing and validating input transactions to the POLAND project.

4. Software development for updating and maintaining the POLAND project master file.

5. Software development for the production of the required reports from the POLAND project.

6. Software development for interfacing with the Manpower Control System and the Skills Inventory System.

IX.   ALTERNATIVES CONSIDERED

This paper has proposed the optimum design. Inasmuch
as the Language Development Program is in an initial
staging period and undergoing modification, it is felt
that the POLAND project should remain as is with refinements
being made to those known problem areas. Therefore an
alternative design has not been considered.

X. CONCLUSION

The proposed conceptual design meets the objectives of

the new POLAND project as outlined in █████████████

These objectives will be achieved in the POLAND project

with a reduction in manpower involvement given the

elimination of current problem areas.

XI. COSTS

A. One-Time Cost

There is only one (1) one-time cost to the user
for implementing the new POLAND project. This cost
is for the training period required to acquaint
personnel with the new Position-Language Control
form and input procedures. It is estimated that
approximately fifty (50) manhours at $5.00 per hour
will be expended for a total cost of $250.00.

It should be noted that the above cost does not
include system analysis costs to complete the system;
computer software development costs; nor computer
hardware costs. These costs will be sustained by the
Office of Computer Services.

B. Annual Savings

The annual maintenance cost of the POLAND project
will be reduced with the elimination of the coding
clerks' duties and the keypunching of transactions.
However, due to the initial aspect of the present POLAND
project, it is impossible to determine the average
volume of transactions per month and the resulting amount
of savings in maintenance costs for processing these
transactions.

XII. RECOMMENDATION

It is recommended that the proposed conceptual design
for the POLAND project presented in this paper be approved.

CONCURRENCES

Name	Title	Signature
ROBERT S. WATTLES	DIRECTOR OF PERSONNEL	
▮▮▮▮▮▮▮▮	DIRECTOR, SIPS TASK FORCE	

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